Quantum

TAPE DRIVE

LTO-3 HH

High Performance Data Protection in a simple and affordable half height form factor

UP TO 800GB CAPACITY (2:1 COMPRESSION)

UP TO 432 GB/HR TRANSFER RATE (2:1)

"BACKUP READY" SOLUTION

3 YEAR RAPID EXCHANGE WARRANTY

Quantum's LTO-3 Half-Height tape drive provides excellent performance while offering up to 400GB of native capacity. Its simple half-height form factor and SCSI or SAS interface option allow easy installation and integration into your datacenter. The LTO-3 HH tape drive is backward read and write compatible with LTO-2 media and backward read compatible with LTO-1 media.

Quantum's FastSense™ feature maximizes the transfer rates of the LTO-3 HH tape drives by using a multiple speed sensor that matches the speed at which the drive is streaming data to optimize the backup cycle. This helps prevent the "back-hitching" that slows down many tape drives if the computer system cannot transfer data fast enough. In addition, Quantum adds features like SmartVerify™ to concurrently verify all data written to the tape, virtually eliminating the time consuming verify pass during backup operations. And, an advanced cooling design helps provide extended tape life.

The LTO-3 HH is available in a server-installable internal, convenient tabletop or space-efficient rackmount configuration. Quantum "Backup Ready" certified solutions allow you to go from box-to-backup in minutes with the highly reliable Quantum LTO-3 HH tape drive, world-class Backup Exec™ QuickStart software and durable Quantum media.

FEATURES AND BENEFITS

- **Superior Performance** – LTO-3 HH reaches native transfer speeds of up to 216GB/hr
- **Complete Solution** – Backup Exec™ QuickStart backup software plus data and cleaning cartridges
- **Reliability You Can Trust** – Enhancement features like SmartVerify™ and Dynamic PowerDown™
- **Compatiblity** – Previous generation media read and write capabilities
- **LTO WORM** (Write Once, Read Many) – addresses regulatory and compliance requirements
- Available in Ultra 320 SCSI or 3Gb/s SAS

ULTRIUM LTO

Backup Exec™ Included BACKUP READY!

DRIVE CAPACITY AND PERFORMANCE

Drive Type	Interface	Cartridge Capacity Native/Compressed (GB)	Drive Throughput Native/Compressed (MB/sec)	Average File Access Time (sec)
LTO-3 HH	3 Gb/sec SAS	400 / 800	60 / 120	70
LTO-3 HH	Ultra 320 SCSI	400 / 800	60 / 120	70

Configurations: Internal Bare, Internal Kit, Tabletop Kit and 1U Rackmount
Interface Connector Type
3 Gb/s SAS: SFF8482 (Internal), SFF8088 (Tabletop and Rack)
Ultra 320 SCSI: HD68 LVDS
Burst Transfer Rate (MB/sec)
SAS (max): 300
SCSI (max): 320
Data Rate Matching Range: 20 to 60 MB/sec native
Data Buffer Size 64 MB

TAPE/FORMAT COMPATIBILITY

LTO-3 (read/write): 400GB native capacity
LTO-3 WORM (read/write): 400GB native capacity
LTO-2 (read/write): 200GB native capacity
LTO-1 (read only): 100GB native capacity

RELIABILITY

MTBF (hours): 250,000 @ 100% duty cycle
Load/Unload Life: 50,000 cycles
Non-recoverable Error Rate: 1 × 10^{17} bits (non-media error, clean drive)

PHYSICAL SPECIFICATIONS

Form Factor	Internal w/o bezel	Internal w/ bezel	Tabletop	1U Rackmount
Width (in/mm)	5.75 / 146.1	5.88 / 149.3	8.8 / 223	19.0 / 483
Height (in/mm)	1.63 / 41.5	1.69 / 42.9	2.9 / 73.0	1.75 / 44.4
Length (in/mm)	8.11 / 206	8.3 / 211	11.7 / 295	25.25 / 641
Weight (lbs/kg)	3.1 / 1.4	3.2 / 1.45	10.3 / 4.7	20.0 / 9.1

ENVIRONMENTAL

OPERATING
Temperature °F (°C): 50° to 104° (10° to 40°) @ 5 CFM
Humidity: 20% to 80% (non-condensing)
Altitude (maximum): 13,000 ft (4,000 m)
NON-OPERATING
Temperature °F (°C): -40° to 150° (-40° to 66°) excluding media
Humidity: 10% to 95% (non-condensing)
VOLTAGE (V): +5VDC, +12VDC (internal); 100-240 VAC 50/60 Hz (external)
POWER CONSUMPTION
Idle: 13 Watts
Typical: 23 Watts
Peak: 31 Watts

TAPE FORMAT SPECIFICATIONS

Recording Format: LTO Ultrium 3
Recording Density: 9.64 Kb/mm
Encoding Method: 16 Channel PRML
Data Compression: ALDC

COMPATIBILITY

Operating Systems: Microsoft Windows, Sun Solaris, Red Hat Linux, SuSE Linux
Software/Hardware: Go to www.quantum.com for the most up-to-date tested solutions

TAPE SPECIFICATIONS

Cartridge Dimensions (L×W×H): 4" × 4.15" × .85" (102mm × 105.4mm × 21.5mm)
Archive Storage: 30 years
Durability: 20,000 load/unload cycles

WARRANTY

Tape: Limited lifetime
Tape Drive: 3 years limited with Rapid Exchange

Model Numbers and Descriptions

TC-L32AX-BR-B LTO-3 HH, Internal Bare, SCSI, black bezel
TC-L32AX-EY-B LTO-3 HH, Internal Kit, SCSI, black bezel
TC-L32BX-EY-B LTO-3 HH, Tabletop Kit, SCSI, black
TC-L33CX-EY-B LTO-3 HH, 1U Rackmount, SCSI, black

TC-L32AN-BR-B LTO-3 HH, Internal Bare, SAS, black bezel
TC-L32AN-EY-B LTO-3 HH, Internal Kit, SAS, black bezel
TC-L32BN-EY-B LTO-3 HH, Tabletop Kit, SAS, black
TC-L33CN-EY-B LTO-3 HH, 1U Rackmount, SAS, black

For contact and product information, visit quantum.com or call 800-677-6268

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Preserving the World's Most Important Data. Yours.™

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About Quantum

Quantum Corp. (NYSE:QTM) is the leading global storage company specializing in backup, recovery and archive. Combining focused expertise, customer-driven innovation, and platform independence, Quantum provides a comprehensive range of disk, tape, media and software solutions supported by a world-class sales and service organization. This includes the DXi®-Series, the first disk backup solutions to extend the power of data deduplication and replication across the distributed enterprise. As a long-standing and trusted partner, the company works closely with a broad network of resellers, OEMs and other suppliers to meet customers' evolving data protection needs.

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